Information Request NEDGC-5-3

Referring to the response to NEDGC 1-2, which response incorporates by reference the response to AG 1-1, explain each of the allocation factors used in AG 1-1(a) and AG 1-1(b) to allocate distribution plant accounts 360 to 373. Provide complete and detailed documentation for your response.

Response

With respect to AG 1-1(a), the allocation factors used to allocate the distribution plant accounts 360-373 in Commonwealth's embedded cost study are provided in the List of Allocators section in Table 8 of the cost study and are described as follows:

Account 360 Distribution and Land Rights cost was allocated to customer classes on the basis of the Proportional Responsibility Allocator (D30SUB). The Proportional Responsibility method assigns a capacity cost factor to each distinct load level in the Company's annual load duration curve. This factor is directly proportional to the ratio of the load level to the annual peak load and inversely proportional to the number of hours for which that load level is sustained. Capacity cost factors are subsequently aggregated across all load levels for each hour in the test year. The hourly capacity cost factors are then spread to customer class in proportion to the customer class responsibilities during each of the defined hours or costing periods. Attachment NEDGC-5-3(a) sets forth an illustrated simplified example of the methodology.

Account 361, Structures and Improvement costs were also allocated to customer classes on the basis of the Proportional Responsibility Allocator (D30SUB).

Account 362, Station Equipment costs were first functionalized between Primary and Secondary voltages. The Primary voltage distribution was allocated to customer classes on the basis of the Proportional Responsibility Allocator (D30SUB), while the Secondary voltage distribution was assigned to customer classes on the basis of the Non-Coincident Peak (NCP) at the secondary voltage level (allocator D31).

Accounts 364 and 365, Poles, Towers, Fixtures and Overhead Conductors costs are first functionalized between Primary and Secondary voltages. The primary voltage distribution is allocated to customer classes on the basis of the NCP at the

primary voltage level (allocator D30) and the secondary voltage distribution is allocated on the basis of the NCP at the secondary voltage level (allocator D30).

Accounts 366 and 367, Underground Conduit and Conductors costs, in a similar fashion to Accounts 364 and 365, are first functionalized between Primary and Secondary voltages and then allocated to customer classes on the basis of the NCP at the primary voltage level (allocator D30) and the NCP at the secondary voltage level (allocator D31), respectively.

Account 368, Line Transformer costs are allocated to customer classes on the basis of the NCP at the secondary voltage level (allocator D31).

Account 369, Services cost are allocated to customer classes on the basis of the service cost responsibility of each class of customers adjusted for the average number of service connections per customer required for each customer class. Street Lighting customers are excluded from this calculation. The allocator as listed in the table 8 is CU31L.

Account 370, Meter costs are directly assigned to customer class based on the number of customers in each class weighted by the relative cost of metering a customer from that class to the cost of metering a residential customer. The allocator is labeled as DA70.

Account 373, Outdoor Lighting costs are directly assigned to the Outdoor Lighting Class. The allocator is labeled DA73.

With respect to AG 1-1(b), the allocation factors used to allocate the distribution plant accounts 360-373 in Cambridge's embedded cost study are provided in the List of Allocators section in Table 8 of the cost study and are described as follows:

Account 360, Distribution and Land Rights cost was first functionalized between 13.8kv and primary voltage levels. The 13.8kv distribution was then allocated to customer classes on the basis of the Proportional Responsibility Allocator at the 13.8kv level (allocator D30HS), while the Primary voltage distribution was allocated to customer classes on the Proportional Responsibility Allocator at the primary voltage level (allocator D30PS).

Account 361, Structures and Improvement costs, in a similar fashion to Account 360, was first functionalized between 13.8kv and primary voltage levels. The

13.8kv distribution was then allocated to customer classes on the basis of the Proportional Responsibility Allocator at the 13.8kv level (D30HS), while the Primary voltage distribution was allocated to customer classes on the Proportional Responsibility Allocator at the primary voltage level (allocator D30PS). Allocator D30PS is identical to allocator D30HS except that the 13.8 kV customer class is excluded.

Account 362, Station Equipment costs were first functionalized between 13.8kv, Primary and Secondary voltages. The 13.8kv distribution was allocated to customer classes on the basis of the Proportional Responsibility Allocator at the 13.8kv level (allocator D30HS). The Primary voltage distribution was allocated to customer classes on the basis of the Proportional Responsibility Allocator at the primary level (allocator D30PS), while the Secondary voltage distribution was assigned to customer classes on the basis of the Non-Coincident Peak (NCP) at the secondary voltage level (allocator D32).

Accounts 364 and 365, Poles, Towers, Fixtures and Overhead Conductors costs are first functionalized between Primary and Secondary voltages. The primary voltage distribution is allocated to customer classes on the basis of the NCP at the primary voltage level (allocator D31) and the secondary voltage distribution is allocated to customer classes on the basis of the NCP at the secondary voltage level (allocator D32).

Accounts 366 and 367, Underground Conduit and Conductors costs, in a similar fashion to Accounts 364 to 365, are first functionalized between Primary and Secondary voltages and then allocated to customer classes on the basis of the NCP at the primary voltage level (allocator D31) and the NCP at the secondary voltage level (allocator D32), respectively.

Account 368, Line Transformer costs are allocated to customer classes on the basis of the NCP at the secondary voltage level (allocator D32).

Account 369, Services cost are allocated on the basis of the services cost responsibility of each class of customers adjusted for the average number of service connections required per customer for each customer class. Street Lighting customers are excluded from this calculation. The allocator as listed in table 8 is CU31L.

Account 370, Meter costs are directly assigned to customer class based on the number of customers in each class weighted by the relative cost of metering a

customer from that class to the cost of metering a residential customer. The allocator as listed in table 8 is DA70.

Account 373, Outdoor Lighting costs are directly assigned to the Outdoor Lighting Class. The allocator is labeled DA73 in Table 8.